

Editorial

Physical activity, aging, and health in China: Addressing public health needs in the presence of continued economic growth and urbanization

The significant increase in the number of older adults in China, coupled with continuing industrialization and urbanization, has profound social and economic ramifications, including the evolution of major challenges to public health, elder care services, policy-making, and the nation's healthcare system. While the unprecedented changes in political and economic structures have obviously increased China's productivity and revenues, what is less well understood is how they have impacted physical activity and health among older Chinese adults, most of whom are underserved and among whom there is an increasing prevalence of non-communicable (chronic) diseases and a greater risk for premature death due to widening differences in socioeconomic status, disease conditions, and access to preventative services and health care.

Globally, there is overwhelming evidence that physical activity is an important determinant of health for older adults.^{1,2} Although the number of epidemiological studies on physical activity in older adults in China is increasing, they are deficient in quantity and/or quality. Thus, research in the field of aging in China has yet to fully address the impact of economic reform on patterns and correlates of physical activity among geographically diverse populations of older Chinese adults. Therefore, from the perspectives of public health and health care of the elderly, there is an urgent need for research and surveillance to understand the forces at work so that relevant, culturally appropriate evidence can be applied effectively in the areas of policy-making, health promotion, and chronic disease prevention, detection, and treatment.

Responding to the imperative presented by this current dilemma, this Special issue of the *Journal of Sport and Health Science* is intended to provide a unique international forum by presenting a wide range of articles specifically focused on relationships between physical activity and health in the aging Chinese population. Within this specific context, contributions were sought from scholars from the Mainland of China with preference given to young and emerging academic researchers. Contributions include scholarly reviews of current physical activity and aging research, health benefits of traditional

Chinese physical activity, exercise interventions for prevention and treatment of chronic diseases, and physical activity patterns and correlates across various settings (urban, suburban, and rural communities) and at different levels (individual, neighborhoods, and broader communities).

The issue begins with a commentary by Ding and colleagues³ on the significance of this special issue for understanding aging and the benefits of physical activity for the aging Chinese population. To expand background and context, Li⁴ presents an overview of demographics, public health challenges, current physical activity epidemiology, and future research needs related to aging and physical activity in China, while Guo and colleagues⁵ offer an introduction to traditional Chinese physical activity and sports that have been practiced for centuries as means of promoting healthy aging and improving quality of life among older Chinese. Moving from traditional physical activity to contemporary research, the 2 articles that follow Guo et al.'s paper focus on the health benefits of physical activity and exercise interventions. The review by Zhu et al.⁶ examines physical activity in urban and rural areas, while Lü and colleagues⁷ provide an in-depth analysis of epidemiological research on exercise and cognitive function. Collectively, these papers not only fill a significant knowledge gap in physical activity and aging research in China but also provide a comprehensive overview of the existing literature on the topic.

The issue also includes 3 original articles, each covering a unique but significant issue in physical activity and aging research in China. The randomized controlled trial by Zhu et al.⁸ assesses, for the first time, the effects of a specifically tailored Tai Ji Quan intervention on gait characteristics in older Chinese women with knee osteoarthritis. It is accompanied by a commentary by Li.⁹ The second article involves a descriptive study, by Huang et al.,¹⁰ that addresses the virtually unexplored but critically important topic of challenges in recruiting participants into clinical or community trials in China. Finally, adopting a social-ecological perspective, Yi et al.¹¹ examine various individual, social, and physical/built environment factors that are associated with habitual physical activity participation among older Chinese adults.

As guest editors of this special theme issue, we hope that this collection of articles provides an enlightening and stimulating introduction to the many ways that physical activity can and

should be used as primary prevention to tackle the public health challenges posed by an aging Chinese population. Both the research need and opportunities for public health in this area are tremendous and the timing could not be more perfect. Now is the time to act.

Competing interests

None of the authors declare competing financial interests.

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Accepted 14 June 2016

Available online 24 June 2016